4.0 LOCATION ANALYSIS

4.1 Introduction

A major objective of the study of this corridor is to utilize the existing roadway to the maximum extent possible. However, it was understood at the outset of the study that some segments of US 60 would require reconstruction to improve the horizontal and vertical alignment of the roadway as well as operational characteristics. In some instances, a relocation of the roadway might even enhance the operation and accessibility of the route while reducing or minimizing the environmental impacts.

All the alternatives utilize the existing roadway as much as possible, typically using the existing roadway prism for one direction of travel. Some of the existing roadway will require either cross section adjustments (superelevation) or profile adjustments to meet design recommendations. To provide the new, adjacent lanes, several alternative alignment concepts were considered, with various combinations of roadway alignments and typical sections possible within each segment studied. This section of the report describes the development of the alternatives, provides an evaluation of the options, and presents recommendations on whether a particular alignment should be considered for further evaluation or discontinued.

When potential alignments for US 60 were evaluated between Florence Junction and Superior, alternative corridors far outside the limits of the existing roadway corridor were considered. As part of this study, review of the regional needs to connect metropolitan Phoenix with Globe and the eastern parts of the State resulted in the attempt to find alternative routes to the north and south of Superior that could convey these motorists to the US 60/ US 70 intersection (See Figure 4-1). However, the topography both north and south of the existing roadway corridor is far more severe than the existing roadway corridor. North of the existing corridor, no new alignment could be found that did not conflict with the Byous and Iron Mountains which ascend from the Queen Creek basin and extends for miles north of the existing roadway. South of the existing corridor, the Apache Leap Ridge, Dripping Spring and Pinal Mountains eliminate any alternative corridor. It was concluded that any connection to the Globe/Miami area would ultimately go through either the Kings Crown Mountains immediately north of Superior, or through the Queen Creek-Devils Canyon corridor through and east of Superior. Attempting a new alignment through the other mountain ranges would result in steep grades and severe cuts, fills and scars to the topography that were considered unacceptable.

Within the Queen Creek basin, there were two corridors that could accommodate the future roadway; the first was the existing corridor, and the second was the old stagecoach route along the Queen Creek. The old stagecoach route generally followed Hewitt Station Road and the Magma Arizona Railroad tracks along Queen Creek north of the existing alignment. This alignment does avoid the steep grades associated with the Gonzales Pass route. However, this route was eliminated because abrupt topography adjacent to the creek would have forced portions of the roadway to be constructed within a flood basin, which would negatively impact Queen Creek. This route also would affect many historic and environmentally sensitive features along this old stagecoach route. Since no other viable options were discovered, the improvement of US 60 will involve widening and/or reconstruction of the roadway within its existing corridor.

Between Florence Junction and Globe/Miami, there is no major roadway facility other than US 60. With no alternate, parallel routes available, both regional and local traffic must continue to use US 60 while the new improvements are constructed. The highway must be designed to accommodate and achieve the following goals:

- Maintain at least two open lanes of traffic during construction.
- Attempt to minimize delays to regional traffic that desire to pass through the area.
- Provide access to adjacent businesses and community developments.
- Provide capacity for future traffic demands resulting from both local and regional growth.

As described in Section 2, traffic projections, passing needs, and safety concerns indicate that US 60 should be widened to four lanes (two lanes in each direction) throughout the length of the study route. From a design, traffic, and construction standpoint, a divided roadway section, with two lanes in each direction, is desirable because it:

- Separates opposing traffic for increased safety.
- Allows retention of native vegetation in the median area and is more visually consistent with the character of the rural, mountainous area than a single, broad expanse of pavement.
- Incorporates independent alignments that permit adjustment of the roadway section to fit the landform thereby minimizing earthwork and the consequent impact upon the landscape in this designated scenic route.
- Allows use of the existing roadway for maintenance of traffic during construction of the improvement project.
- Permits the continued use of the existing roadway alignment for one direction of travel.

However, an undivided roadway also has many advantages in and possibly adjacent to the Superior area where continued land development is likely adjacent to the corridor. For these instances, consideration must be given to:

- Facilitating continuous access to properties adjoining the roadway from either direction of travel.
- Minimizing the need for additional R/W from private properties.
- Minimizing the impact to (or loss of) business establishments.
- Desirability of an urban type roadway in a developed (or developing) area.
- Minimizing construction costs by widening the existing roadway in place.
- Minimizing the impact on the adjacent landscape by limiting the width of roadway improvement.
- Providing left-turning movements onto intersecting streets and driveways to businesses and homes.

Therefore, the divided roadway concept was investigated for all of the rural areas on the corridor from Florence Junction to Superior and an undivided roadway concept was investigated within the developable Town of Superior area (see the Typical Sections in Appendix A).

Several Alternate Routes were considered, however the topography of the adjacent mountain ranges did not allow the feasible consideration of routes in another corridor.

Alternative Route Considered

An additional route could be constructed parallel to the Old Stage Coach Route and Queen Creek, however, this alignment results in impacts to sensitive historic and environmental features. As a result, this route was no longer considered.

Stage / Queen Creek Route Considered

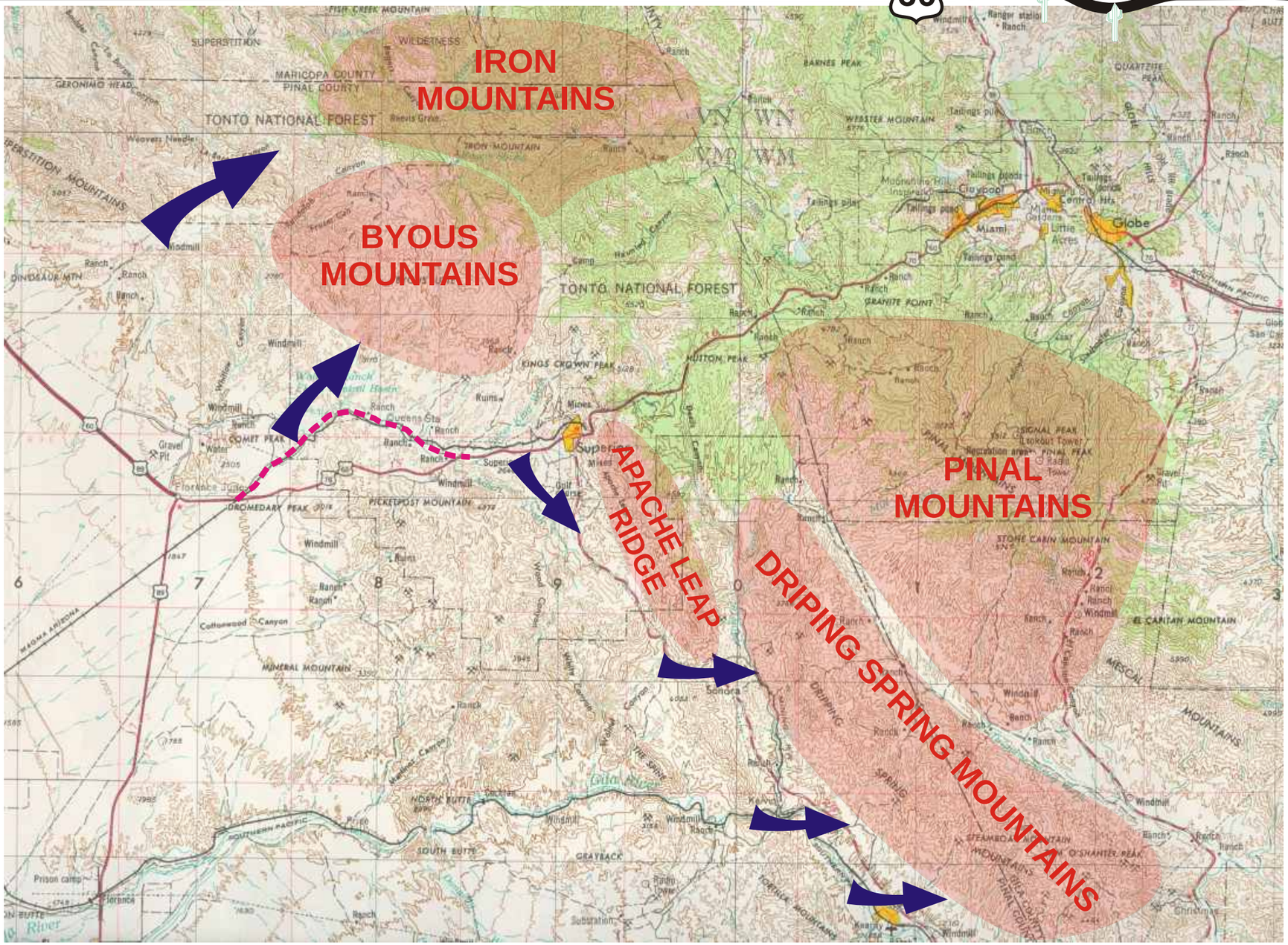

FIGURE 4-1
TOPOGRAPHICAL / ENVIRONMENTAL RESTRICTIONS

4.2 Descriptions of Study Segments and Alternatives.

To facilitate the description of the Alternatives, the project has been divided into five Segments (see Figure 4-2).

- **Segment A** (Florence Junction to Queen Valley Road)
- **Segment B** (Queen Valley Road to Gonzales Pass)
- **Segment C** (Gonzales Pass to Boyce Thompson Arboretum)
- **Segment D** (Boyce Thompson Arboretum to Superior)
- **Segment E** (Town of Superior)

Within each segment, several alternatives were considered to improve US 60. These alternatives were developed using USGS mapping, and guided by input from public/agency scoping sessions, field reconnaissance, and the results of the Accident Evaluation and AASHTO Controlling Design Criteria reports. As noted earlier, the actual number of possible alternative alignments was limited due to the rugged terrain north and south of the study area. Rough profiles were also prepared along all alternative centerlines to aid in the subsequent evaluation and comparison.

An evaluation of each alternative alignment was prepared and distributed as the Feasibility Study for US 60. This document was distributed to technical disciplines within ADOT and the cooperating agencies for review. This was followed by a cooperative, consensus meeting on June 30, 1999, resulting in the selection of several alignment alternatives for further study. The evaluation results were presented in a public meeting, with a request for comment and input on August 5, 1999. Those attending the meetings favorably accepted the alignments presented for further consideration.

In the following text, an overview of the existing conditions for each segment is provided in the segment description. Following each segment review is a brief description of each of the alignment alternatives considered within that segment during the Feasibility Study, and the results of whether that alternative should be considered for further evaluation. Each alternative had been developed based on the project objectives and using the design controls listed in Section 6.2.

4.2.1 No-Build Alternative:

The No-Build Alternative is provided for comparison purposes and provides no improvements to the existing roadway section. It involves no cost and no apparent change to the environmental features of the US 60 corridor.

4.2.2 Segment A (Florence Junction to Queen Valley Road):

(Note: The following discussion is predicated on the premises that the Florence Jct TI does is not yet constructed).

Segment A begins at the western study limits at MP 211.7 which is about ½ mile west of the old intersection of SR 79 and US 60 and extends to about 3 miles east, just east of the Queen Valley Road intersection and Magma Arizona Railroad crossing near MP 215.2 (See Figure 4-2). Existing US 60 transitions from a 4-lane divided facility at the west end of Segment A to a 2-lane rural highway east of the junction of SR 79. The junction with SR 79 is a channelized at-grade "T" intersection with stop control on the northbound to westbound movement and the westbound to southbound traffic movement. Non-stop slip ramps are provided for traffic going eastbound on US 60 to southbound on SR 79 and for northbound traffic on SR 79 turning onto eastbound US 60. The accident rate at this intersection is about four times the State average.

Near the east end of Segment A, Queen Valley Road intersects US 60 from the north forming a "T" intersection. This "T" intersection has an angle of intersection of about 35 degrees. The accident rate at this intersection is about ten percent higher than the State average. Just east of Queen Valley Road, railroad tracks also cross US 60 at an angle of intersection of about 35 degrees with an at-grade crossing. These tracks are part of the Magma Arizona Railroad, and are maintained by the BHP Copper Co. Although the railroad is still operational, currently it is only used about once a year. Because of the low activity, this crossing has been identified as exempt, allowing busses and tankers to cross without stopping.

At the west end of the segment, a paved roadway turnout called El Camino Viejo intersects the divided section of US 60 (MP 211.9). This roadway heads to the north forming a skewed "T" intersection and is accessed from the west with a paved median crossover. South of US 60, opposite El Camino Viejo, is a private residence with a driveway turnout on US 60. Just east of the SR 79 intersection is a Texaco gas station and small commercial/industrial business. Access to these buildings is provided by two asphalt driveways located about 150 feet apart. There is an abandoned ADOT rest area on the north side of US 60 near milepost 214. The final access point in this segment is a dirt road on the south side of US 60 near MP 214.3, leading to off road trails, recreation sites, and ultimately a military shooting range.

This entire segment of US 60 has been designated as fully access controlled by the Transportation Board. Future improvements within the US 60 corridor must require direct access from the Florence Junction or Queen Valley Road TIs to comply with this designation.

The existing right-of-way width in Segment A varies. It generally is 300 feet wide west of SR 79 and 200 feet wide east of SR 79. The R/W width on SR 79 is also 200 feet wide. With the exception of a few private parcels adjacent to the SR 79 intersection, all land that abuts the roadway is owned by State Lands.

Storm runoff generally flows from the northeast to the southwest crossing the highway at 45-degree angles. There are 3 minor wash crossings and one large wash crossing. An existing 10'x4' concrete box culvert crosses US 60 at MP 211.9, while a 4-barrel 5'x4' box culvert crosses at MP 212.2 (Structure No. 4132). Other box culverts include a 5 barrel 10'x8' concrete box culvert that crosses US 60 at MP 213.2 (Structure No. 4133), and a 6'x7' box culvert that crosses at MP 214.1. There are 10 other culvert crossings in Segment A

Several utilities are located along US 60 and SR 79 in this study segment. Southwest Gas has a 2" gas line on the south side of US 60 from SR 79 to the Texaco station on the north side of the road. They also maintain a 4" line on the west side of SR 79. There is an overhead power line that crosses over the SR 79 junction and heads east along the south side of US 60 to the Texaco. ADOT also has facilities at the junction of SR 79 and US 60 including streetlights, flasher lights, pull boxes and buried conduit. There is an overhead telephone line that parallels the highway along the north side of US 60 from El Camino Viejo to Queen Valley Road. A microwave/cell phone tower is also located on the north side of US 60, west of SR 79. The Arizona Water Company maintains a 12" steel water line that crosses US 60 on the west side of the railroad tracks, and US West has a buried telephone cable on the east side of the tracks that also crosses US 60.

Alternative A-1 consists of constructing a 4-lane divided roadway with grade separated traffic interchanges (TIs) at SR 79 and Queen Valley Road. The existing roadway will be used for westbound traffic while the eastbound traffic will use a new roadway located 108 feet south of and parallel to the existing roadway. Grade separated interchanges will be constructed by raising the US 60 improvements over SR 79 and over Queen Valley Road. The Queen Valley Road overpass will also cross over the Magma Arizona Railroad tracks. New roadways will be provided north of the SR 79 TI to provide access to private property, state land, and El Camino Viejo Road. This alternative was **recommended for further evaluation.**

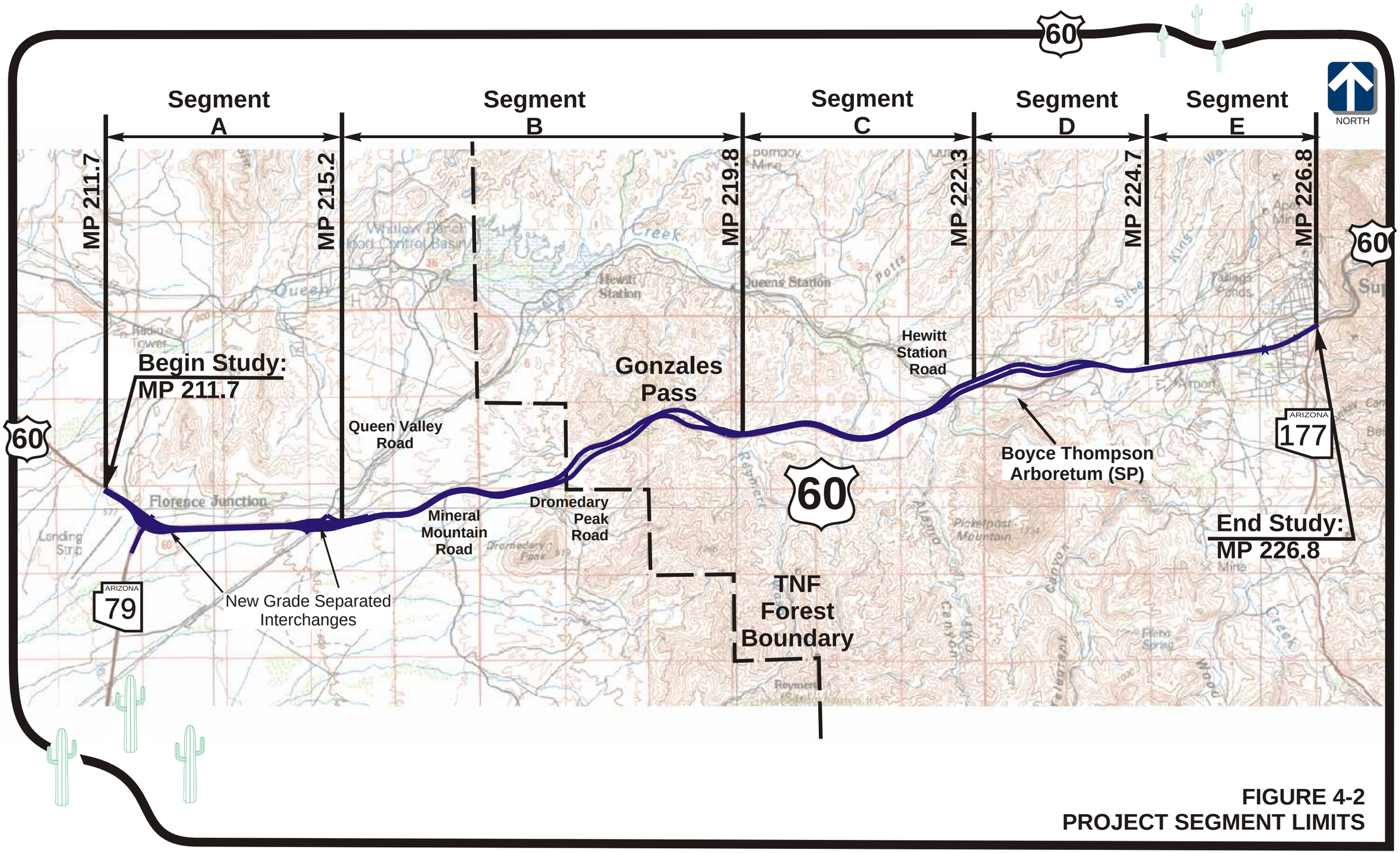

FIGURE 4-2
PROJECT SEGMENT LIMITS

Alternative A-2: Similar to Alternative A-1, A-2 proposes to construct a parallel roadway to the existing US 60 alignment. However, the improvements are located 108 feet to the north side of the existing. Similar again to A-1, grade separations at SR 79 and at Queen Valley Road would be used. Alternative A-2 would conflict with many existing properties, and the geometry at the US 60/SR 79 TI would require significant modification. In addition, State Lands had indicated that they would rather have the improvements constructed to the south side of US 60, leaving more developable lands to the north. This alternative was **not recommended for further evaluation**.

4.2.3 Segment B (Queen Valley Road to Gonzales Pass):

Segment B begins at the eastern limits of Segment A (MP 215.2) which is just east of the intersection of Queen Valley Road and extends almost 5 miles to the east side of Gonzales Pass at MP 219.9 near Reymert Wash (See Figure 4-2). Existing US 60 through this segment is typically a 2-lane 40-foot wide rural highway. An eastbound climbing lane was added by re-stripping the existing 40-foot wide section from MP 217.5 to MP 218.8 and a westbound climbing lane exists from MP 218.8 to MP 220.0. The existing alignment in this segment has 15 horizontal curves and profile grades vary from 0.5% to 6%. The accident rate in this segment of US 60 is below the State average except for the Gonzales Pass area where the accident rate is about 35% above the average.

There are three existing turnouts on the south side of US 60 located at MP 215.9, MP 216.5, and MP 217.0. The first turnout (Mineral Mountain Road) leads to a recreation area and shooting range. The second turnout provides access to a maintenance road for an El Paso Natural Gas pipeline. The third access point, Dromedary Peak Road, provides access to State Lands south of US 60. All three of these access points lie within a portion of US 60 that has recently been designated as a controlled access route. The controlled access designation extends from the end of the Superstition Freeway (eastern limits of Apache Junction) and continues west to the TNF Boundary near MP 217.34. Beyond the Forest Boundary, there is one additional turnout on the north side of US 60, at MP 218.6, that again provides maintenance access to the EPNG gas line. This access road is also the historic US 60 alignment.

The property adjacent to the roadway is owned by State Lands up to MP 217.4, which is the western boundary for TNF. Adjacent land east of the boundary is all within the National Forest. US 60 is designated as the Old West Scenic Highway beginning at MP 214.5 (starting just east of the railroad crossing). The scenic designation continues east through the end of the study limits. The R/W width is 200 feet (100 feet on either side) up to the TNF boundary, where the R/W expands to 400 feet (200 feet on each side) for the balance of the segment. Right of Way through the TNF in the form of an easement

The predominate drainage flow pattern in Segment B is from east to west along the existing highway. Storm runoff flows south along the north side of the ravine, west of Gonzales Pass and flows to the north east of the pass. There are 5 minor wash crossings in Segment B; two near MP 215, one near MP 217.7 and two other crossings near MP 219.5. Major wash crossings include a (4) barrel 10'x6' concrete box culvert that crosses US 60 at MP 214.9 (Structure No. 4134), and a 6'x7' box culvert crossing at MP 215.2. A majority of the 28 other culvert crossings in Segment B are located near Gonzales Pass.

Several utilities are located along US 60 in this segment. EPNG maintains a 6" pipeline that crosses US 60 at 3 locations within the segment. The first at MP 216.5 where the pipeline changes direction and then generally follows the US 60 alignment to the east through Gonzales Pass to the eastern end of the segment. After crossing US 60, the pipeline is located up to 600 feet north of the highway until it crosses US 60 again at MP 217.6. The pipeline follows the roadway within the south ADOT R/W from the second crossing to the third crossing at Gonzales Pass. From Gonzales Pass to the end of the segment, the pipeline is up to 1100 feet north of US 60. The pipe crossings are in 8" casings and the pipe spans washes and ravines above ground at 19 locations. In addition to EPNG, there is also a 3" Southwest Gas pipeline that connects to the EPNG gas line near MP 216.9. The Southwest Gas pipeline heads north from the EPNG gas line.

Alternative B-1 includes the construction of a 4-lane divided highway. The existing roadway will be used for westbound traffic while eastbound traffic will be accommodated on a new independent roadway alignment located south of the existing roadway. Near Gonzales Pass the roadways come together and transition so that the eastbound traffic is on the existing US 60 alignment and the westbound traffic shifts to the north on a new independent roadway alignment. While the divided alignment with independent alignments was desirable, the State Land Department required acquisition of all of the property between the roadways, making the alternative too costly. As a result, Alternative B-1 was **not recommended for further evaluation**.

Alternative B-2 consists of constructing a 4-lane divided highway by utilizing the existing roadway for westbound traffic and the eastbound traffic will use a newly constructed roadway located generally 108 feet south of and following the existing US 60 alignment. Near the TNF boundary line, the new eastbound roadway shifts further to the south and follows the Alternative B-1 alignment to the end of the segment. This alternative was **recommended for further evaluation.**

Alternative B-2a consists of constructing a 4-lane divided highway similar to Alternative B-2. Once the improvements cross Gonzales Pass, the new WB alignment follows an independent alignment rather than the alignment that parallels the existing, as the B-2 alternative does. This alternative was **recommended for further evaluation.**

Alternative B-3 also provides a 4-lane divided highway. The future eastbound traffic will use the existing US 60 roadway while the westbound traffic will use a new independent roadway located north of the existing alignment. Prior to the TNF boundary, the roadways shift so that the westbound traffic follows the existing alignment and the eastbound traffic shifts to the south and follows the Alternative B-1 alignment. The new eastbound roadway remains to the south of the existing through Gonzales Pass and rejoins existing US 60 east of Gonzales Pass to the end of this segment. The westbound roadway transitions to 108 feet north of the existing roadway east of Gonzales Pass to the end of Segment B. This alternative was **not recommended for further evaluation.**

Alternative B-3a is similar to Alternative B-3 except the new westbound roadway continues on an independent alignment north of the existing roadway until it joins the existing highway east of the TNF boundary line instead of west of the boundary. As this alternative approaches Gonzales Pass, it too transitions to follow the improvements proposed in the B-1 Alternative. This alternative was also **not recommended for further evaluation.**

4.2.4 Segment C (Gonzales Pass to Boyce Thompson Arboretum):

Segment C begins as a continuation of Segment B (MP 219.9), which is about a mile east of the Gonzales Pass summit and extends 2½ miles to the Boyce Thompson Southwestern Arboretum near MP 222.3 (see Figure 4-4). Existing US 60 is a 2-lane 40-foot wide rural highway. A westbound climbing lane was added by re-striping the existing 40-foot wide section from MP 219.8 to MP 220.0. The existing alignment in this segment has 5 horizontal curves and profile grades that vary from 0.0% to 3.9%. The existing accident rate is below the State average in this segment. US 60 is a scenic corridor the entire length of Segment C.

There are five existing turnouts along US 60. The first turnout is located on the north side of the roadway near MP 221 (FS Road 295/2392) that provides access to recreation lands within the TNF and ultimately intersects with another dirt road near Queen Creek. This turnout is also a trailhead for accessing the Arizona Trail, which crosses US 60 at MP 221. The next driveway at MP 221.9 provides access to several residences north of the highway. Turnouts at MP 221.5 (FS Road 231) and MP 222.1 (FS Road 310) provide access to National Forest land and hiking/biking trails (Alamo Canyon Passage) south of US 60. Hewitt Station Road (FS Road 357) intersects US 60 near MP 222.4 (Note: This roadway only intersects a portion of Alternative C-1. Most of this roadway exists within Segment D). This roadway is a historic stage route that follows the Queen Creek and ultimately joins US 60 to the west via Queen Valley Road. This turnout also provides access to FS Road 8, which is a trailhead for Roger's Trough and the Reavis Trail.

The property adjacent to the roadway is TNF land west of MP 222. US 60 traverses private land and land controlled by Boyce Thompson Southwestern Arboretum east of MP 222. The private land contains a number of residential homes and ranch structures north of the highway. The R/W width is 400 feet (200 feet on either side) in Segment C except for the area adjacent to the Arboretum near the east end of the segment. Within these parcels, the R/W is 100 feet on either side of the existing centerline.

The predominate drainage flow pattern is from south to north across the existing highway towards Queen Creek which crosses US 60 at MP 222.2. Queen Creek generally flows from east to west. Queen Creek is crossed with a 216-foot 3-span steel girder bridge (Structure No. 296). A Concrete slab bridge crosses Reymert Wash at MP 219.8 (Structure No. 286). Alamo Canyon wash is crossed by a 3-barrel 12'x12' concrete box culvert at MP 221.9 (Structure No. 4136) and an unnamed wash is crossed at MP 221.0 with a 2 barrel 10'x8' box culvert (Structure No. 4135). There are also 4 other minor wash crossings and 20 additional pipe crossings within Segment C.

Several minor utilities are located along US 60 in this segment of the study. El Paso Natural Gas Company maintains a 6" pipeline that is located 15 to 1400 feet north of the existing US 60 roadway along the entire length of Segment C.

Alternative C-1 consists of constructing a 4-lane divided roadway by using the existing roadway for westbound traffic and an entirely new independent roadway for eastbound traffic located south of the existing US 60 alignment, following portions of the original US 60 roadway. While the independent alignment is desirable, the impacts to the Arboretum at the eastern end were objectionable to the State Park and to the agencies. Since Alternative C-1a offered all of the same benefits without the intrusion onto Arboretum property, this alternative was **not recommended for further evaluation.**

Alternative C-1a is the same as Alternative C-1 except that near MP 221 the independent eastbound roadway transitions to a parallel roadway located 108 feet south of the existing roadway alignment to the end of the segment. This modification avoids intrusion into the Arboretum. This alternative was **recommended for further evaluation.**

Alternative C-2 also includes a 4-lane divided roadway. The eastbound roadway follows the existing alignment to near MP 221 where it shifts to the south to avoid Queen Creek. The eastbound lanes then parallel the existing roadway to the south for the balance of the segment. The westbound roadway parallels the existing, located 108 feet to the north, until MP 221 where it transitions to follow the existing alignment to the end of the segment. This alternative was **recommended for further evaluation.**

4.2.5 Segment D (Boyce Thompson Arboretum to Superior):

Segment D begins at the east end of Segment C (MP 222.3), east of the Queen Creek bridge crossing, and extends over 2 miles to the east to MP 224.8 (see Figure 4-5). The existing US 60 is a 2-lane 40-foot wide rural highway. The existing alignment in this segment has 5 horizontal curves and profile grades that vary from 0.2% to 4.5%. The accident rate is 18 percent greater than the average rate for the State at the main entrance of the Boyce Thompson Southwestern Arboretum, and is below the average elsewhere in the segment. US 60 is a scenic corridor within the entire length of Segment D.

There are six existing turnouts along US 60 in this segment. Hewitt Station Road (FS Road 357) intersects US 60 to the north near MP 222.4. This roadway is a historic stage route that follows the Queen Creek and ultimately returns to US 60 to the west via Queen Valley Road. This turnout also provides access to FS Road 8, which is a trailhead for Roger's Trough and the Reavis Trail. The main entrance to the Arboretum is located south of the mainline at MP 223.1. Directly across the street is FS Road 2395, which continues north to the Magma Railroad and then follows the railroad till the road connects with US 60 again across from the Picket Post access at MP 223.8. Finally, FS Road 2403 provides access into the National Forest lands including the Picket Post Mountain Natural Research Area and Old Pinal townsite near MP 224.2.

US 60 in Segment D is adjacent to TNF lands, the Arboretum, private property and Pinal County property. Most of the County property south of US 60 is within the Town of Superior limits. The Arboretum land is generally located in the western end of the segment while the County land is on the south side of the highway at the east end of the segment. The private land is located near the center of the segment and the National Forest land is generally located north of US 60. The Magma Arizona Railroad tracks are located north of the highway and are only about 100 feet north of the roadway centerline near MP 224.2.

The main drainage flow pattern in this segment is from north to south across the existing highway towards Queen Creek, which is located south of US 60. Queen Creek generally flows from east to west. Silver King Wash is a major drainage feature that crosses US 60 at MP 223.7 with a 3-span concrete slab bridge (Structure No. 318). Minor washes cross US 60 at MP 222.9 (Structure No. 228), MP 224.4 and 224.6 (Structure No. 319). There are also 10 other minor culvert crossings within Segment D.

Several major utilities are located along US 60 in this segment of the study. El Paso Natural Gas Company maintains a 6" pipeline that is located 46 to 1500 feet north of the existing US 60 roadway along the entire length of Segment D. An overhead telephone line is also located north of US 60. It crosses the highway near MP 223.6 and remains south of the existing roadway alignment to the end of the segment.

Alternative D-1 consists of widening the existing roadway to provide a 5-lane undivided section along the existing US 60 alignment nearly throughout this segment. It will transition from the divided roadway section of Alternative C-1a or C-2 to the undivided 5-lane section near the Happy Camp Wash Bridge. This alternative was **not recommended for further evaluation.**

Alternative D-2 consists of constructing a 4-lane divided highway on a new independent alignment around the north side of the knoll that is north of the Arboretum, and remains south of the Arizona Magma Railroad Tracks. The new roadway rejoins the existing alignment near MP 224.3 and transitions into a 5-lane rural section. The 5-lane section is maintained to the end of the segment. Alternative D-2 was **recommended for further evaluation**.

Alternative D-3 is similar to Alternative D-2 west of the Silver King Wash at MP 223.6. Near the Wash, the new westbound roadway begins to transition back to match the existing roadway alignment, and the eastbound traffic shifts to the south on a new, independent alignment that goes on the south side of a hill to the end of the segment. This alignment traverses private property and state park land. Alternative D-3 was **not recommended for further evaluation.**

4.2.6 Segment E (Town of Superior Limits):

Segment E begins at Station MP 224.8 which is near the west end of the Town of Superior and extends over 2 miles to the east to the Junction of SR 177 (MP 226.8) near the east end of Superior. Existing US 60 is a 2-lane, 40-foot wide rural highway from the beginning of the segment to the Queen Creek Bridge at MP 226.1. Left turn lanes have been provided at the intersections of the landfill access road, Mary Drive and Main Street. From the Queen Creek Bridge east, US 60 is an urban 55-foot wide roadway section with two through lanes, continuous left turn lane and two 8-foot wide curbside parallel parking lanes. The existing alignment in this segment has one horizontal curve and profile grades vary from 1.1% to 4.1%. There are 43 existing turnouts, driveways and street intersections along US 60 in this segment. The accident rate in Segment E is about 1.5 to 2 times more than the State average.

US 60 in Segment E is generally surrounded by private property. There is Pinal County property south of US 60 at the west end of the segment and TNF land to the north in the west portion of the segment.

The predominate drainage flow pattern is from northeast to southwest across the existing highway towards Queen Creek which is located south of US 60. Queen Creek generally flows from east to west. Queen Creek crosses US 60 at MP 226.1 with a 4-span concrete slab bridge (Structure No. 436). Minor washes cross US 60 at MP 225.4, 225.6, 225.8 and 226.0. There are also four other minor culvert crossings within Segment E.

There are numerous utility crossings within this segment of US 60. Utilities include Arizona Water Co., Southwest Gas, Arizona Public Service Company, and US West Communications. APS, US West and WonderCom Cable TV lines are attached to utility poles overhead.

Alternative E-1, which includes a rural 5-lane section (no curb or sidewalk) from the beginning of the segment to Main Street and an urban 5-lane section (with curb and sidewalk) from Main Street to the end of the segment. Both sections will utilize the existing roadway, which will be widened on both sides to provide the 5-lane section. Alternative E-1 was **recommended for further evaluation.**

4.3 Conclusions

Several alternative alignments have been developed and evaluated for improvement of US 60 between Florence Junction and the Town of Superior to enhance safety and traffic operational characteristics of the roadway and to meet current and future traffic needs. In addition to traffic and safety, several improvements were considered to enhance the roadway appearance while blending in with the adjacent landscape and potential development. Based upon the input and consensus reached at the ADOT/Agency meeting on June 30, 1999 and the Public Information meeting held on August 5, 1999, the alternatives recommended for further study include the following:

Study Segment	Alternatives Carried Forward for Evaluation
No Build	No Build Alternative
A	A-1
B	B-2, B-2a
C	C-1a, C-2
D	D-2
E	E-1